# Autism Summer Course 2024 - CHLD S350E / PSYC S350E Session B, July 1<sup>st</sup> - August 2<sup>nd</sup>, 2024

#### **COURSE OVERVIEW**

Instructor: Fred R. Volkmar M.D. – Irving B. Harris Professor; fred.volkmar@yale.edu

**Teaching Fellow:** Scott L. Jackson, Ph.D. – Assistant Clinical Professor; scott.jackson@yale.edu

**Dates:** July 1<sup>st</sup> – August 2<sup>nd</sup>

Meeting Times: Tuesdays and Thursdays from 10:00 AM-11:30 AM EDT

Zoom Link: https://yale.zoom.us/j/98553127566

#### **Course Description:**

This course consists of lectures (3 per week – ONLINE) and two mandatory live online discussion groups (10:00-11:30 AM Tuesday/Thursday) focused on autism and related disorders of socialization. Autism is an early-onset neurodevelopmental disorder impacting socialization, communication, and learning. Current epidemiological data suggest a prevalence of approximately 1 individual with this disability per 68 (if it is broadly defined). This seminar brings together clinical practice and research within the context of a developmental psychopathology framework. The course will include material on major topics in etiology, diagnosis and assessment, treatment and advocacy, and social neuroscience methods and covers infancy to adulthood.

# **Readings:**

The assigned texts are:

- Autism and Pervasive Developmental Disorders, 3rd Edition (F. Volkmar, Editor), Cambridge University Press, 2019.
- A Practical Guide to Autism: What Every Parent, Family Member, and Teacher Needs to Know, 2<sup>nd</sup> Edition (Volkmar & Wiesner), John Wiley & Sons, 2021.

Required readings will be posted to canvas as .pdf files, so you only need to get the above books. The Cambridge Press book is more academic and scholarly and, as you can guess from the title, the practical guide is written more for parents and teachers.

Additional journal articles will be assigned as well. Chapters and articles will be posted on the course website as .pdf files (within the "Modules" section, on the "Instructions" page for each week) and students are expected to be up to date on the video lectures and related readings.

#### **Grading:**

Course grades will be based on attendance and participation, response papers, a proposal for the final research paper and the final research paper itself (final paper weighted most heavily).

The grading will be broken down as follows: 20% for response papers, 20% for class attendance and participation, and 60% for the final paper.

#### **Response Papers:**

Prior to each discussion day, students will prepare for our discussion by reflecting on the lectures/readings in a brief response paper. Students must submit a response by 6:00PM Eastern Standard Time **the DAY BEFORE CLASS DISCUSSION**. Response papers should be between 200-300 words. There may be a specific writing prompt some weeks, or they may be open-ended to give students a chance to raise issues of interest to them. All response papers should conclude with 1-3 questions that will be used to facilitate the discussion during seminars. These should be emailed to Dr. Jackson (scott.jackson@yale.edu) who will pull them together for Dr. Volkmar to use during the discussion times.

#### Final paper timeline [IMPORTANT DATES!!]:

Friday 7/19 - Proposal Due

Friday 7/26 - Last day to submit a draft

Friday 8/2 - Paper Due

## Final paper proposal:

By the date specified (7/19), please submit a maximum 2-page Word document detailing plans for your final paper. It is essential that this proposal makes clear a thesis that will be advanced or question that will be addressed in your paper; straightforward summaries of the literature are not acceptable for the final paper, and we want to see your emerging thesis in this proposal. The Teaching Fellow will be available to help you decide upon a topic and you can schedule and individual meetings with Dr Volkmar or Dr. Jackson.

#### Final paper:

By the date specified (8/2), please submit a 10- to 15-page essay, double-spaced (not including references). The final paper must follow the proposal submitted mid-term. Use American Psychological Association (APA) format for your in-text citations and references. If you are unfamiliar with this format, refer to the "Publication Manual of the American Psychological Association." Paper references must rely on peer-reviewed scientific journal articles. These papers should serve as a major source of information for your project.

#### Papers will be evaluated in terms of:

- 1. Quality of scholarly literature review (focus on scientific articles, sufficient depth and breadth, thoughtful analysis)
- 2. Clarity of thesis (cohesive, well-organized)
- 3. Formatting (references in APA format, double-spaced)
- 4. Mechanics of writing (thesis stated, introduction and conclusion, complete sentences, spelling, grammar)
- 5. Creativity is a bonus!

The Instructor and Teaching Fellow are available to review drafts through one week prior to the final paper due date. In other words, it will not be possible to obtain feedback on paper drafts submitted after the date specified above.

#### **Academic Honesty:**

Any collaboration on written assignments is forbidden. Any plagiarism on written assignments will be associated with a failing grade on the assignment, possibly in the class, and serious disciplinary action. Please see Yale's academic dishonesty policy for more details: <a href="http://catalog.yale.edu/handbook-instructors-undergraduates-yale-college/teaching/academic-dishonesty/">http://catalog.yale.edu/handbook-instructors-undergraduates-yale-college/teaching/academic-dishonesty/</a>

#### Class Schedule:

The course will include live online seminar discussions twice a week (T/TH 10:00 - 11:30 EDT) to discuss course topics. The sessions will be led by course faculty and attendance is required (20% of your final grade). Because this will be a seminar style class, your active participation in class is required and vital to extracting the full value possible from the course. You will be expected to attend every live class session for the full duration unless you have made other arrangements with Dr. Volkmar. You are also expected to have your camera on for the duration of the meeting in order to better foster discussions and interactions with your classmates. Always keep your camera on and have your face visible! We can take attendance any time.

## Unit 1: Week 1 (July 1st - July 5th)

## MONDAY July 1<sup>st</sup>

By the end of the day you should have watched the assigned lecture, done the reading, and written your first 'response' paper – see the section on submitting a response paper for more details.

**Lecture 1**: VOLKMAR – Overview of autism (1 hour 7 minutes)

**Reading**: A Practical Guide to Autism (Volkmar & Wiesner): Chapter 1. Optional reading is Autism and Pervasive Developmental Disorders: Chapters 1 (Introduction to Autism) and 2 (Epidemiology) - These will be posted online.

#### **Response Paper 1 and discussion questions** (due by 6:00PM):

In 1 page tell us about yourself (major, year, interests, future goals, and why you are interested in autism). Any special reason for taking this course (e.g., a family member with autism). We will discuss papers on July 2<sup>nd</sup>.

### **TUESDAY July 2<sup>nd</sup>**

ONLINE SEMINAR (10:00-11:30AM EST):

Overview of course, discussion of logistics and of response papers.

# WEDNESAY July 3<sup>rd</sup>

By the end of the day you should have watched the assigned lecture, done the reading, and written your 'response' paper.

**Lecture 2**: TSATSANIS – Assessment (48 minutes)

**Reading**: A Practical Guide to Autism (Volkmar & Wiesner): Chapter 2 and Appendix 2. Optional reading is Autism and Pervasive Developmental Disorders: Chapter 3 (Psychological Factors)

## **Response Paper 2 and discussion questions** (due by 6:00PM):

Discuss one difficulty in diagnosis and assessment of children with autism and our understanding of psychological factors in autism.

#### **THURSDAY July 4th**

**ONLINE SEMINAR** (10:00-11:30AM EST):

Discussion of lecture and 2<sup>nd</sup> response paper, psychological processes and issues in diagnosis and psychological assessment in autism. We will discuss savant skills and the implications of "scatter" on psychological testing for diagnosis and treatment.

## FRIDAY July 5<sup>th</sup>

**Lecture 3**: PAUL – Communication (1 hour 50 minutes)

Reading: Autism and Pervasive Developmental Disorders: Chapter 4 (Communication)

# Unit 2: Week 2 (July 8th - July 12th)

# MONDAY July 8<sup>th</sup>

By the end of the day you should have watched the assigned lecture, done the reading, and written your 'response' paper – see the section on submitting a response paper for more details.

**Lecture 4**: CHAWARSKA – Autism in Infants and Young Children (1 hour 14 mins)

**Reading**: A Practical Guide to Autism (Volkmar & Wiesner): Chapter 5 (Infants and Young Children) – Will be posted online.

## **Response paper 3 and discussion questions** (due by 6:00PM):

In thinking about early diagnosis write about either the challenges of diagnosis or the pros/cons of early diagnosis – what do you see as major issues?

## **TUESDAY July 9th**

ONLINE SEMINAR (10:00-11:30AM EST):

Discussion of response papers, early diagnosis.

### WEDNESDAY July 10th

By the end of the day you should have watched the assigned lecture, done the reading, and written your 'response' paper.

**Lecture 5**: VOLKMAR – Changing Face of Autism (56 minutes)

**Reading**: A Practical Guide to Autism (Volkmar & Wiesner): Chapters 6 (School-Age) and 7 (Adolescents and Adults)

#### **Response paper 4 and discussion questions** (due by 6:00PM):

What do you think accounts for the apparent changes in outcome in autism?

#### **THURSDAY July 11th**

**ONLINE SEMINAR** (10:00-11:30AM EST):

Discussion of response papers, adult outcomes.

# FRIDAY July 12th

**Lecture 6:** VOLKMAR – Overview of Model Programs (42 minutes)

**Reading**: A Practical Guide to Autism (Volkmar & Wiesner): Chapter 3 (Educational Programs and Interventions)

## **Unit 3: Week 3 (July 15th – July 19th)**

## MONDAY July 15<sup>th</sup>

By the end of the day you should have watched the assigned lecture, done the reading, and written your 'response' paper – see the section on submitting a response paper for more details.

**Lecture 7**: POWERS & PALMEERI – Behavioral Interventions (1 hour 38 minutes)

**Reading**: Powers - Behavioral Assessment of Individuals with Autism (Chapter 28: Handbook of Autism:  $4^{th}$  edition, pp.695-736) – Will be posted online.

## **Response paper 5 and discussion questions** (due by 6:00PM):

Discuss some aspect of similarity or difference in model program or some aspect of behavioral intervention in autism.

## TUESDAY July 16th

ONLINE SEMINAR (10:00-11:30AM EST):

Discussion of response papers, model programs, behavioral interventions.

# WEDNESDAY July 17th

By the end of the day you should have watched the assigned lecture, done the reading, and written your 'response' paper.

**Lecture 8**: MCDOUGLE – Psychopharmacology (1 hour 5 minutes)

**Reading**: Autism and Pervasive Developmental Disorders: Chapter 7 (Psychopharmacology). Optional reading A Practical Guide to Autism (Volkmar & Wiesner): Chapter 8 (Medical Care).

#### Response paper 6 and discussion questions (due by 6:00PM):

Pick one of the following to respond to:

- (1) What are the pros/cons of drug treatments?
- (2) How might behavioral interventions and drug treatments be combined?
- (3) How do we understand the role of other conditions in relation to autism, e.g., fragile x or other conditions?

#### THURSDAY July 18<sup>th</sup>

**ONLINE SEMINAR** (10:00-11:30AM EST):

Discussion of response papers, drug treatments.

## FRIDAY July 19th

**Lecture 9:** REICHOW – Evidence Based Treatments in Autism (58 minutes)

**Reading**: Reichow and Barton - Evidence based psychoeducational Interventions (Chapter 42:  $Handbook\ of\ Autism\ 4^{th}\ edition,\ pp.\ 969-992)$  - Will be posted online.

**NOTE:** PAPER PROPOSAL DUE TODAY!

# Unit 4: Week 4 (July 22<sup>nd</sup> - July 26<sup>th</sup>)

# MONDAY July 22<sup>nd</sup>

By the end of the day you should have watched the assigned lecture, done the reading, and written your 'response' paper – see the section on submitting a response paper for more details.

**Lecture 10:** McPARTLAND – Social Brain and Brain Function in Autism (1 hours 9 Mins)

**Readings**: McPartland, J. & Pelphrey, K. (2012). The implications of social neuroscience for social disability. *Journal of Autism and Developmental Disorders*, 42(6), 1256-1262.

# **Response paper 7 and discussion questions** (due by 6:00PM):

Please pick one of the following to respond to:

- (1) What are the uses and limitations of evidence-based treatment approaches in autism?
- (2) Why are treatments studies so (comparatively) sparse?
- (3) How does work on evidence-based treatments inform practice guidelines?
- (4) How does conceptualizing autism as a disorder of social brain development inform intervention approaches?

#### **TUESDAY July 23rd**

## ONLINE SEMINAR (10:00-11:30AM EST):

Discussion of response paper 7, the current state of evidence-based treatment approaches for autism.

#### WEDNESDAY July 24th

By the end of the day you should have watched the assigned lecture, done the reading, and written your 'response' paper.

#### **Lecture 11:** PELPHREY – Neuroimaging Studies in Autism (1 hour 10 minutes)

**Reading**: Voos, A. C., Pelphrey, K. A., Tirrell, J., Bolling, D. Z., Vander Wyk, B., Kaiser, M. D., ... & Ventola, P. (2013). Neural mechanisms of improvements in social motivation after pivotal response treatment: two case studies. *Journal of autism and developmental disorders*, 43(1), 1-10 - will be posted online.

#### Response paper 8 and discussion questions (due by 6:00PM):

Please pick one of the following to respond to:

- (1) How does the information presented in this lecture complement that in the previous one?
- (2) What do MRI studies tell us that is different than studies using EEG approaches, how does our understanding of the social brain in autism inform studies of normal development?

#### **THURSDAY July 25th**

ONLINE SEMINAR (10:00-11:30AM EST):

Discussion of response papers 8, social neuroscience, brain function and neuroimaging studies of autism.

## FRIDAY July 26th

**Lecture 12:** GUPTA – Genetics (55 minutes)

**Reading**: Autism and Pervasive Developmental Disorders: Chapter 5 (Genetics)

**Optional Reading:** Rutter and Thapar - Genetics of Autism Spectrum Disorders (Chapter 17:  $Handbook\ of\ Autism\ 4^{th}\ edition,\ pp.\ 411-423$ ). This will be posted online.

**Response paper 9 and discussion questions** (due by 6:00PM):

Discuss some aspect of the genetics of autism, e.g., implications for understanding etiology, brain development, family planning, animal models in autism.

# NOTE: TODAY IS LAST DAY TO SUBMIT A DRAFT OF YOUR PAPER FOR REVIEW AND COMMENT BY INSTRUCTOR AND TEACHING FELLOW!

## Unit 5: Week 5 (July 29th – August 2nd)

#### MONDAY July 29<sup>th</sup>

By the end of the day you should have watched the assigned lecture, done the reading, and written your 'response' paper.

**Lecture 13**: SINGER – Parental Perspectives (54 minutes)

Reading: A Practical Guide to Autism (Volkmar & Wiesner): Chapter 15 (Supporting Families)

**Optional Reading**: Fiske, Pepa, & Harris - Supporting Parents, Siblings, and Grandparents of Individuals with Autism Spectrum Disorder (Chapter 40: *Handbook of Autism 4<sup>th</sup> edition*).

#### **Response paper 10 and discussion questions** (due by 6:00PM):

Please pick one of the following to respond to:

- (1) How does the current system of care benefit or detract from family involvement in treatment?
- (2) What changes could we make in the current system to improve care?

#### TUESDAY July 30th

ONLINE SEMINAR (10:00-11:30AM EST):

Discussion of response papers, family and social policy issues.

#### WEDNESDAY July 31st

By the end of the day you should have watched the assigned lecture, done the reading, and written your 'response' paper.

**Lecture 14**: LOFTIN – Autism and the Law (39 minutes)

**Reading**: Mayerson - Autism in the Courtroom (Chapter 45: *Handbook of Autism 4<sup>th</sup> edition*). Woodbury-Smith, M., & Dein, K. (2014). Autism spectrum disorder (ASD) and unlawful behaviour: Where do we go from here?. *Journal of autism and developmental disorders*, 44, 2734-2741. Both will be posted online.

# **Response paper 11 and discussion questions** (due by 6:00PM):

Discuss how the characteristics of autism can impact interactions with the legal system.

## **THURSDAY August 1st**

**ONLINE SEMINAR** (10:00-11:30AM EST):

Discussion of response papers, legal issues in autism, review of course.

# FRIDAY August 2<sup>nd</sup>

Optional Lecture 15: VOLKMAR AND BROWN – College Students with Autism (55 minutes)

NOTE: FINAL VERSION OF TERM PAPERS DUE BY MIDNIGHT — BE SURE TO INCLUDE YOUR NAME IN THE COVER PAGE, TITLE, AND FILE NAME FOR THE PAPER. PDF OR WORD DOCUMENTS ARE ACCEPTED.